

AMENDMENTS TO THE SPECIFICATION

1. Please amend the specification of the captioned application as follows:
2. Please replace the paragraph on page 1, lines 3-11, with the following rewritten paragraph:

The present application is related to the following commonly-owned U.S. Patent Applications:

U.S. Patent Application No. 10/646,099 filed August 22, 2003 ~~Attorney docket number 200206975-1~~ entitled "BUS CLOCK FREQUENCY MANAGEMENT BASED ON DEVICE BANDWIDTH CHARACTERISTICS", naming as inventors Andrew H. Barr, Ricardo Espinoza-Ibarra and Kevin Somervill; and

U.S. Patent Application No. 10/646,078 filed August 22, 2003 ~~Attorney docket number 200206932-1~~ entitled "BUS CLOCK FREQUENCY MANAGEMENT BASED ON CHARACTERISTICS OF AN APPLICATION PROGRAM", naming as inventors Andrew H. Barr[,]) and Ricardo Espinoza-Ibarra and ~~Kevin Somervill~~; both of which are hereby incorporated by reference herein.

3. Please replace the paragraph on page 18, lines 13-30, with the following rewritten paragraph:

Figure 8 is a flowchart 800 of an embodiment of the present invention. At 802, the devices are queried to obtain information about their power consumption and/or heat dissipation characteristics. At 804, this information is received. Alternatively, as previously described, this information can also be obtained from a RAM or a ROM. At 806, information about the application program is obtained. At 808, if the application program is memory intensive, control passes to 812 ~~[[810]]~~, otherwise control passes to 810 ~~[[812]]~~. At 810, clock frequencies are calculated based on the information about the devices and the application program, favoring the I/O devices, i.e., allocating higher clock frequencies to I/O devices, and lower clock frequencies to memory units, than would otherwise be done. At 812, clock frequencies are calculated based on the information about the devices and the application program, favoring the memory units, i.e. allocating higher clock frequencies to memory units, and lower clock frequencies to I/O devices, than would otherwise be done. These clock frequencies can be, for example, the highest clock frequency at which devices accessed by the program can operate without exceeding a system's

power budget and/or thermal budget, adjusted for the relative bandwidth requirements of the devices and favoring I/O devices or memory units, depending on characteristics of the application program. At 814, hardware, firmware or software is set to generate clock signals according to these calculated frequencies.